

People



Places



Projects & Programs



Publications



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CPHST Entomologist Releases Biological Control
Agent against Sirex Woodwasp

PHST entomologist, **David Williams**, carried out a controlled release of an exotic nematode against *Sirex noctilio* on November 6-7, 2006. Williams and his small, but energetic, crew from CPHST and



Inoculation holes in Scots pine containing nematodes in gel (A) and an Australian punch hammer (B)

the New York State Department of Environmental Conservation (NYSDEC) inoculated 96 pine trees at five sites in central New York State with the biological control agent

In 2005, surveyors in New York State first identified the sirex woodwasp, a native of Eurasia and exotic invader in pine plantations throughout the southern hemisphere. Surveys since that time have revealed that *Sirex* is established in much of central and western New York and two counties of Pennsylvania. If it is not controlled, this killer of pine trees has the potential to be very destructive in forest ecosystems in the United

States. Since the 1970s, Australian scientists have developed the parasitic nematode, Beddingia siricidicola, as an effective management tool for *Sirex* in pine plantations. Transfer of this biological control technology by **CPHST** holds great promise for



CPHST technician Molly Botts makes inoculation holes with a punch hammer

managing Sirex in the United States.

In preparing for the release, CPHST and New York State personnel located 96 pines with signs of *Sirex* attack. NYSDEC tree cutters then felled the trees, which included red, Scots, and white pines. At the same time, Williams received shipments of nematodes from Ecogrow, an Australian company that specializes in producing insect parasitic

nematodes. To inoculate the trees, he mixed lots of one million live nematodes enough to treat 10 trees - in a gel suspension. Crew members punched fifty holes through the bark and into the sapwood of each tree using special punch hammers. They then squirted nematode gel into the holes using a plastic squeeze bottle. Once the nematodes are injected into the tree, they swim out of the gel and into the tree's vascular



Continued on next page

Biocontrol Agent against Sirex Woodwasp (Continued from page 1)

system where they attack Sirex larvae.

The inoculated trees will remain in the field until May 2007. Sample bolts, or short logs, from the trees will be cut and held in cages for emerging of Sirex and other wood boring insects, which will be dissected and examined for

nematodes. Pending the completion of a full Environmental Assessment by PPQ Environmental Services in Riverdale, the release is designated as "controlled," meaning that nematodes will not be permitted to escape into the environment. The controlled release enables testing of the application technology as well as an

evaluation of nematode overwintering survival and infectivity under North American conditions. It paves the way for a full scale release in the fall of 2007.



Submitted by David Williams



Citrus Canker Wind Dispersal Study



Airboat motor and propeller assembly to produce hurricane force winds

ver the past several years the movement and spread of citrus canker disease, a bacterial disease caused by Xanthomonas axonopodis pv. citri, in Florida has been facilitated by various tropical weather events including tropical storms and hurricanes. To better understand this process and thereby provide a sound scientific basis for the development of citrus canker control recommendations. The USDA ARS Ft. Pierce Subtropical Plant Pathology Research Unit and the CPHST Pest Detection Diagnostics and Management Laboratory collaborated on infection studies to look at the effect of various wind speeds on the dispersal and resulting infection of citrus canker. Since hurricanes may

play an important part in the dispersal of citrus canker bacteria, it was necessary for these studies to generate near hurricane force winds by employing an airboat motor and propeller assembly. The engine on the airboat unit is a Chevy 350 cubic inch engine, and at its top speed, is capable of developing near hurricane force winds of approximately 70 mph. The strong winds proved to be a challenge in keeping both inoculum grapefruit trees, used to provide the citrus canker bacteria in a natural setting,

and weather monitoring stations upright. Special collection panels and braces were developed by PDDML to collect windblown bacterial inoculum and to prop up trees. The study involves directing the high force winds and water spray through a canopy of infected grapefruit fruit trees. The windblown bacterial laden spray is then sampled with special panels at various intervals downwind of the airboat. Young non-infected trees

were also placed at measured intervals downwind from the infected grapefruit trees to allow infection estimates. Spray captured in the sampling panels is plated onto selective growth media to determine the concentration of bacteria. Resulting lesions on the young trees are counted to determine the actual amount of infection. It was observed that with increasing wind speed there is an increase in the number of bacteria and infections on target leaves. Earlier studies with wind speeds well under hurricane force showed that citrus canker is readily dispersed in wind-driven rain and

dispersed in large quantities immediately after the rain stimulus occurs. Measurements made over a period in excess of 50 hours indicated that bacteria were continually present in the wind-driven rain splash. Canker lesions exposed to extended periods of rain and wind continually produce bacteria although at lower levels as compared to initial bacteria release.



Citrus canker lesions





Inside the National Plant Germplasm & Biotechnology Laboratory

he National Plant Germplasm and Biotechnology Laboratory (NPGBL) was established in 1994 as an APHIS PPQ Methods Development Laboratory in Beltsville, MD. In a 1999 restructure, the NPGBL was moved into the Center for Plant Health Science and Technology (CPHST). The NPGBL began with two scientists and today has grown to include a Laboratory Director-Plant Pathologist, Dr. Laurene Levy; a Quality Manager-Plant Pathologist, Renee **DeVries**; a Laboratory Support Assistant, Hazel Goodwin; five Senior Plant Pathologists, Dr. Kurt Zeller, Dr. Zhaowei Liu, Dr. Mark Nakhla, and two NCSU Researchers: Dr. Vessela Mavrodieva and Dr. Wenbin Li: and four Junior Plant Pathologists, Elizabeth Twieg, Kristina Owens, Sarika Negi, and **Deric Picton**. Over the next several years the NPGBL will continue growing

U.S. military and national laboratories, and stakeholders for the development, adaptation, and validation of cuttingedge biochemical and molecular methods. Since the NPGBL became a registered APHIS Select Agent Program Laboratory in 2005, the development and/or validation projects at the lab have also focused on several Select Agent plant pathogens, including citrus greening (Huanglongbing [HLB]), Ralstonia solanacearum race 3 biovar 2, plum pox virus and soybean rust (both recently de-listed),

samples). The use of these methods

identifying pathogens of interest

The NPGBL established several

identification.

provides a high degree of confidence in

beyond morphological characteristics,

regulatory response based on a correct

as well as addressing concerns over a

successful collaborative partnerships

with U.S. and international scientists,

and in FY2007, citrus variegated chlorosis and potato wart.

The NPGBL's long-term goal is to become internationally recognized for plant pathogen molecular and biochemical diagnostics development, validation, and delivery. We strive to provide accurate and rapid

The National Plant Germplasm and Biotechnology Laboratory staff diagnosis and differentiation of plant pathogens for PPQ. Since 1996, the laboratory has been instrumental in building capacity for plant pathogen diagnostics within PPO by providing molecular and biochemical confirmation of Karnal bunt (Tilletia indica), plum pox virus, potato mop top virus, Ralstonia solanacearum race 3 biovar 2, soybean rust (Phakospora pachyrhizi), citrus greening (HLB or Candidatus Liberibacter asiaticus), and potato cyst nematode (Globodera pallida). As stated earlier, non-routine federal confirmation for certain plant pathogens will continue at the NPGBL:

(routine) diagnostic confirmation will. as of March 2007, begin to be provided by the newly formed PHP PSPI-Molecular Diagnostics Lab (MDL) co-located with the NPGBL at Building-580.

The NPGBL transfers the diagnostic methods it develops and/or validates to its stakeholders, including PPQ programs conducting operational confirmatory diagnostics (i.e., PHP PSPI-MDL); other state, federal, and international regulatory programs that conduct survey and surveillance activities; and to the USDA-CSREES National Plant Diagnostics Network (NPDN). Technology transfer occurs through outreach activities to the



NPGBL scientist Dr. Wenbin Li trains NPDN diagnosticians in molecular detection of citrus greening (HLB) in April 2006

to meet the scientific needs of PPQ for regulatory plant pathogen diagnostics.

The NPGBL mission is to develop, adapt, validate, implement, use, and deploy advanced biochemical and molecular methods for the detection and identification of regulatory and high consequence plant pathogens at a genetic level. As part of its mission, the NPGBL is charged with the responsibility for Federal confirmatory molecular diagnosis of certain high consequence plant pathogens with non-routine status (i.e., first U.S. records and high consequence

diagnostic community by conducting intensive hands-on laboratory training at the NPGBL in Beltsville, MD. We also release detailed SOPs for conducting validated diagnostic methods in PPQ national surveys and pest response that meet ISO 17025 standards and provide on-going technical support to stakeholders who use the validated diagnostics.

To meet the CPHST commitment to deliver quality products to our stakeholders, the NPGBL is in the final stages of a two-year process for ISO 17025:2005 accreditation. The newly developed CPHST National Plant Pathogen Continued on next page

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however, the activities for operational

Inside the NPGBL (continued from page 3)

Laboratory Accreditation Program (NPPLAP) is meeting the needs for quality assurance within PPQ programs and relevant National Plant Diagnostic Network programs. The three year old Proficiency Test (PT) Program for *Phyophthora ramorum* at the NPGBL provides technical support and reagents to NPPLAP by developing and deploying proficiency test panels and providing the initial evaluation of the completed proficiency test results. The test panels are used as a training

aid and to demonstrate precision in performing biochemical or molecular methods based on the results. These panels may be comprised of negative and positive samples for the specific method, which are known to the PT unit within the NPGBL. In 2005, proficiency in *P. ramorum* molecular diagnostics was verified by distributing 23 PT panels. As a result, 10 diagnosticians from 8 laboratories were provisionally approved. In 2006, 37 diagnosticians from 17 laboratories

received *P. ramorum* PT panels. We continuously improve every aspect of the program. Thirty-six diagnosticians have already requested panels for 2007. The PT group in the NPGBL is currently working on finalizing the PT panels for HLB diagnostics. Proficiency panels for other plant pathogens and pests are under consideration and development as well.



Submitted by Laurene Levy



ANPCL Assists in the Cactus Moth Project

n late 2005, the CPHST Analytical and Natural Products Chemistry Laboratory (ANPCL) began assisting Dr. Stephen **Hight**, an ARS research entomologist, in the Cactus Moth Project. This program was initiated to suppress the spread of the cactus moth to the west of Dauphin Island, Alabama by developing a biocontrol technique, sterile moth releases. The ANPCL participation involves monitoring and clean-up work on Dauphin Island and Little Dauphin Island. Craig Hinton, an ANPCL Physical Science Technician (PST), routinely visits Dauphin Island and Little Dauphin Island 2-3 times per week to check traps (sticky paper tents on poles) for moths and record what was caught. He reloads the



Clean-up crew removing infected cactus pads. Left to right: Chris Albanese (ARS), Joe Dawson (ANPCL), L.T. Smith (ARS), Dr. Stephen Hight (ARS), and Gene Bohannon (ANPCL)

pheromone baits in the traps when he checks them. Monitoring also includes checking sentinel cacti marked with flags for infestation, live worms inside the cactus pads, or egg sticks (they look like cactus thorns). They collect infested pads and note the plant ID and where on the plant they came from. They also collect any egg sticks and send them back to the cactus rearing laboratory in Florida.

On most Wednesdays, **Joseph** Dawson, ANPCL PST, accompanies Craig Hinton on trips to Little Dauphin Island (this requires two staff since a boat trip is involved) to assist in clean-up and food gathering duties. Clean-up involves the removal of non-sentinel plants around the sentinel. In theory, this forces any moths to go to the observed plant. They also trim back sentinel plants so observers can more easily monitor them. The entire process is highly labor intensive and requires multiple truck loads to remove old cacti and other vegetation they pullup around the plants. During cleanup, they harvest good pads (about 10-12 tote bins full) to send back to the rearing laboratory for moth "food." From time to time, many of us (4+ employees at a time) will drive over to help Craig and Joseph



ARS scientists Dr. Stephen Hight (left) and Chris Albanese (right) by a sentinel plant

perform clean-up duties. The ANPCL staff is encouraged to come along so they too can gain experience in this type of work. ANPCL plans to continue providing support through this winter concerning basic clean-up and food gathering. We also hope to continue participation in monitoring next season.



Good cactus pads harvested for moth "food" at the rearing laboratory



Submitted by Robert Smith

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Methyl Bromide Alternatives

ethyl bromide is currently the most widely used fumigant in quarantine operations. It is

quarantine operations. It is effective against numerous pests, including insects, mites, nematodes, snails, and fungi, occurring on a diverse range of commodities. However, the ozone-depleting properties of this chemical are necessitating its phase out, and as such, various alternatives to this commonly used treatment option are being explored.

The development of new applications for two other fumigants, phosphine and sulfuryl fluoride, is a primary component in this search for alternative treatments. The first of these fumigants, phosphine, has historically been utilized for grains, tobacco, cotton, and other durables, which can withstand both the longer treatment times normally required by this fumigant and the ammonia residues produced from the solid formulations of this chemical. New research, however, suggests that the application of gaseous formulations of phosphine at low temperatures may be less phytotoxic, and therefore, an acceptable option for treating commodities such as fresh



Cylinderized phosphine--ECO2FUME®

Sulfuryl fluoride has also been demonstrated to be an effective fumigant

for the control of stored product insects. Since becoming registered under the ProFume® label, this chemical has been increasingly replacing methyl bromide for the disinfestation of mills, warehouses, and other food handling establishments. Research is also continuing on documenting the efficacy of this fumigant for wood-inhabiting fungi and nematodes.

Controlled Atmosphere/ Temperature Treatment Systems (CATTS) utilize forced air vapor heat systems conducted under conditions of low oxygen and high carbon dioxide. The incorporation of this modified atmosphere allowed reductions in treatment time, which minimizes commodity damage, while still maintaining the required treatment efficacy. Seven treatments involving this technology were developed by USDA-ARS for use on peaches, nectarines, cherries, and apples. CPHST recommended CATTS to be incorporated into the PPQ Treatment Manual.

While not a replacement option, methyl bromide recovery systems provide a method for reducing up to 90% of the

emissions of this fumigant to the atmosphere. Operating systems in California and at the DFW airport in Texas utilize a trapping approach to recovery, in which the fumigant effluent is vented through an adsorber cartridge. This cartridge, when full, is returned to the manufacturer for methyl bromide removal and bromine recapture.

Other approaches, including irradiation, vacuum, and radiofrequency, are also in various stages of development and implementation. These technologies, in addition to other fumigants, CATTS, and recovery systems, provide PPQ with valuable tools with which to better safeguard both America's agricultural and natural resources.



Methyl bromide recovery system



Submitted by Nichole Levang-Brilz & Larry Zettler



fruits.

CRCNPB- Plant Biosecurity Research in Australia

he Cooperative Research Centre for National Plant biosecurity (CRCNPB) was established in 2005 to strengthen Australia's plant Biosecurity research capability. The driver for the Centre was the realisation that while Australia had greatly enhanced the policy-side of plant biosecurity in recent years, the research side had not kept pace. CRCNPB is now the central coordinating body for plant biosecurity research in Australia. The focus of the Centre's research is exotic plant pests (insects and plant pathogens) that directly threaten the economic viability of Australia's plant industries, which have a farm-gate value of over AU\$18 billion (US\$ 14 billion) and contribute over AU\$14 billion (US\$ 10.8 billion) to

export income.

The CRCNPB has research activities that cover the full biosecurity continuum to include pre-border, border and post-border. The priority research areas are preparedness and prevention, diagnostics, surveillance and impact management. Priority research projects for CRCNPB include 1) systems based on risk-weighted, science-based decision-making; 2) diagnostic technology that is accurate, sensitive, reliable and cost-effective; 3) a surveillance system based on scientifically sound sampling tools and survey methodologies; and 4) decreased economic and social impact from incursions of exotic plant pests through

new control, risk mitigation and recovery strategies. The Centre also has a strong focus on education. To ensure Australia can provide future plant biosecurity specialists, the CRCNPB invests in an education program that educates school children through to PhDs.

The CRC is managed through six programs: 1) Preparedness and Prevention, 2) Diagnostics, 3) Surveillance, 4) Impact Management, 5) Education and Training, and 6) Commercialisation and Utilisation. Each program has a program leader much as CPHST has National Science Program Leaders.

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CRCNPB- Plant Biosecurity Research in Australia (continued on page 5)

CRCNPB is very conscious of the global nature of plant biosecurity research and as such is developing strong linkages with organisations such as CPHST to maximise our collaborative research efforts. Initially projects in PDA technology, databases, simulation modelling and economics provide ideal opportunities for collaborative research between the two organisations. The first activity to develop this collaboration was the QUADs Mobile Information Systems Technologies (MIST) workshop held in Hawaii on December 12 and 13, 2006. The workshop's objective was to develop a QUADs strategy for collaboration on MIST for improved plant biosecurity surveillance. After some preliminary discussion we discovered that all of the QUAD countries worked with MIST, but the efforts of each were

spotty and not across all programs. Our future collaboration has three goals: 1) to improve data quality from surveillance, 2) to improved technology adoption by end-users, and 3) to



Back row: Barry Windle (CRCNPB), Rob Delane (CRCNPB/DAFWA), Gordon Gordh (CPHST), John Lovett (CRCNPB), Johann Van Der Merwe (Chevron)
Front row: Simon McKirdy (CRCNPB), Dan Fieselmann (CPHST), Richard Stoklosa (Chevron), Jane Moran (CRCNPB/DPIVIC), Christine Campbell (CRCNPB)

promote information sharing between countries.

In September 2005, **Gordon Gordh** and **Dan Fieselmann** attended the plant Biosecurity Symposium hosted by CRCNPB. The CRCNPB team will continue to work with Gordon and the CPHST team to identify research activities that can provide collaborative efforts that will benefit both countries. Plant biosecurity offers many new exciting research opportunities and it is my hope that the linkage between our two organisations and the other QUAD countries will continue to increase.

More detail on the CRCNPB can be found at www.crcplantbiosecurity.com.au



Submitted by Dr Simon McKirdy, CEO, CRC for National Plant Biosecurity, Canberra, Australia



Training the Next Generation

SDA-APHIS-PPQ-CPHST helps develop regulations and methodologies for plant resource management that are based on a comprehensive understanding and application of scientific principles. Presently, most academic programs do not include in-depth discussions of the issues and challenges related to regulatory activities. To address this deficiency in academic training, the CPHST Plant Epidemiology and Risk Analysis Laboratory (PERAL) in Raleigh collaborates with the Departments of Plant Pathology and Entomology at North Carolina State University (NCSU) in the development of a curriculum in Regulatory Plant Science.

The curriculum objectives are to:

- advance the understanding of and compliance with Federal regulations;
- increase comprehension and knowledge about invasive species and exotic plant pests and diseases while exploring regulatory issues; and
- train students in the application of the latest tools, strategies, and technologies used in regulatory plant protection.

By partnering with NCSU, CPHST-PERAL utilizes the university's established curricular infrastructures, and in return, PERAL provides unique expertise to the university. The core of this curriculum centers on courses already in existence at NCSU such as General Entomology (ENT425), Principles of Plant Pathology (PP315) and Weed Science (CS414).

CPHST-PERAL developed an upperlevel undergraduate and graduate threecredit course titled "Challenges in Plant Resource Protection" and a one-credit course on the "Fundamentals of Pest Risk Analysis." These courses provide theoretical and applied training to students in the regulatory aspects of plant protection using real-world case studies, scenarios, and issues and develop their problem solving abilities in critical areas such as risk analysis and risk management.





The Fundamentals of Risk Analysis class, Fall Semester 2006

Guidelines for seminars/internships are being developed by CPHST-PERAL in order to continue building the Regulatory Plant Science curriculum. In addition, new university partners were recruited. At present, Florida A&M University (FAMU) in Tallahassee, FL and the Plant Medicine Program at University of Florida (UF) in Gainesville, FL are new partners in a more global effort towards capacity building in the area of Regulatory Plant Science. In spring 2007, the "Challenges in Plant Resource Protection" course will be taught simultaneously at NCSU, FAMU and UF through IP-based videoconferencing facilitated by NCSU.



Submitted by Stephanie Bloem



Admin Tidbit: Things to Come in 2007 for IT

APHIS is gearing towards a different approach to IT Service Management, ITIL

he Information Technology Infrastructure Library (ITIL) is a series of books that outline the processbased best practices for IT Service Management. IT Service Management is the process of managing IT services to effectively and efficiently meet the needs of the customer/user. ITIL is the most widely used management approach to the delivery and support of IT services and infrastructure worldwide. These guidelines and architectures ensure that IT processes are closely aligned to business processes and that IT delivers the correct and appropriate business solution. By the Agency adopting IT Service Management principles, as outlined in the ITIL processes, organizations hope to achieve benefits such as an increase in efficiency, reduction in cost, improved alignment of IT with the business, better use of IT resources, improved customer satisfaction, reduced service interruptions, and improved IT compliance. If you are interested in an overview of the different modules of ITIL, there are several courses available on Aglearn, ITIL: The Service Desk and

Incident Management, ITIL: Service Level and Capacity Management, ITIL: Problem and Change Management, ITIL: Financial Security Management, ITIL: Continuity and Availability Management, and ITIL: Configuration and Release Management.

ITIL is not a standard nor does it contain rules or regulations; these are just guidelines that the Agency will incorporate to fit our business needs. The processes will not be implemented overnight; bits and pieces will be applied at a time. What does this mean to you? You will see different policies in the coming year that concern software compliance, software purchasing, off contract hardware purchasing and service desk (ATAC) changes.

APHIS Information Technology Department (ITD) Directives

I would recommend that everyone familiarize themselves with the current APHIS ITD Directives. These directives are located at www.aphis.usda.gov/ library/directives/

3120.1 - Software License Compliance 3120.2 - APHIS Computer Naming Convention

3140.2 - APHIS Electronic Mail

Security and **Privacy Policy** 3140.3 - APHIS Internet Use and Security **Policy**

3140.4 - APHIS Desktop Computer Security Policy 3140.5 - APHIS Information System Security (ISS) Roles and Responsibilities

We will see some changes and additions to these directives this year. APHIS ITD is currently revising the Software License Compliance Direction and a new directive will be in place in early fall.

CPHST Property Check-Out Forms

In March everyone will be signing a CPHST Property Check-Out Form. This form will let each user know that they are financially responsible for the lost, theft or damage (depending on the circumstances) of any IT equipment (e.g., laptops, monitors, keyboards, cell phones, PDAs, Blackberries, etc.) that is assigned to them. A copy of this form will be given to you and the original will be placed in your personnel record.



Submitted by Corina McArthur



Outreach: Mississippi Schools Receive CPHST Donations

hemical analysis is dependant upon utilization of state-of-the-art technology. Instrumentation used to conduct residue analysis is often outmoded with 3-5 years of introduction. As the Analytical & Natural Products Chemistry Laboratory (ANPCL) moves forward in technology, it is left with obsolete versions of analytical instrumentation for either trade-in or disposal. ANPCL, therefore, routinely donates obsolete instruments and chemistry glassware to school systems such as the Loving Care Montessori School in Long Beach, MS; Gulfport High School in Gulfport, MS; Jefferson Community School in Townsend, WA; and Mississippi State Chemical Laboratory. By donating instruments, ANPCL provides working

instruments that schools use in their laboratories. Often, the instruments donated provide out-of-date and, therefore, unavailable parts to existing analytical systems saving the schools from purchasing much more expensive



Students from Jefferson Community School in Port Townsend, WA

newer models for replacements. These schools have shown their appreciation through gracious letters stating that with the donations "schools are better supported to guide students to have a strong foundation in science which will assist them in understanding the complexity of our world."

These donations establish a method to dispose of obsolete materials (too small for the usual disposal proposals for government property) free of charge, create a community outreach mechanism that is mutually beneficial, and provide a communication link between local schools and the USDA.

Submitted by Robert Smith

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CPHST Sets a New Direction

In August 2006, a representative group of CPHST stakeholders and a select group of CPHST employees met in Riverdale, MD to help create the PPQ Strategic Plan for CPHST 2007-2012. As I have stated in the past, the CPHST Strategic Plan sets a new, effective direction or change to our project prioritization, resource allocation, and management decision-making. The plan provides a roadmap focused on long-term goals to increase production and outcomes for our stakeholders. During the planning process, we thought it was essential to include the participation of those who depend on and use our technology and science, because they have first-hand feedback on PPQ program needs. As you will see, our stakeholders' comments and input are reflected throughout the Strategic Plan. We would like to thank all of you who dedicated time to the development of this vital plan. I encourage you to read the plan which is accessible at http://cphst.aphis.usda.gov/docs/PPQ Strategic Plan for CPHST.pdf.

In order to ensure the Strategic Plan is a reality, the leadership of CPHST, PPQ headquarters and the Regions met on February 13-15, 2007 to draft an operational

plan. The meeting was a "roll up your sleeves" event at which we set out some ambitious plans to implement the Strategic Plan through specific tasks geared to achieve the Strategic Plan's five goals and their respective objectives. The Operational Plan identifies the responsibilities and resources needed to accomplish priorities in this fiscal year, and allows us to measure our progress and accomplishments. We will be tracking progress on the Operational Plan each quarter throughout the fiscal year. We will make the Operational Plan available for all on the CPHST website once it is finalized.

Both plans chart the course for CPHST over the next five years to ensure that we're supporting PPQ's scientific needs. We are committed to focusing efforts and resources towards these plans to guarantee they are living, breathing documents.



PPQ Strategic Plan

for the

Center for Plant

Health Science and

Technology

Fiscal Year 2007-2012

Submitted by Vic Harabin



Award: APHIS Science Fellow Program

The **CPHST National Weed Management Laboratory's** project proposal for the APHIS Science Fellows program titled "A broad-based system for assessing risk associated with imported plants for planting" was selected to be adopted in APHIS beginning in FY 08. Out of six proposals, this proposal was selected for its potential impact on the APHIS mission, its feasibility, and the overall importance of the anticipated scientific contributions to be derived from the project.





CPHST Publications

Flores, D. and Carlson, J.W. 2006. Biological Control of Giant Salvinia in East Texas Waterways and the Impact on Dissolved Oxygen Levels. Journal of Aquatic Plant Management 44:115-121.

Li, W., J. S. Hartung and L. Levy. 2007. Evaluation of DNA Amplification Methods for improved Detection of "*Candidatus* Liberibacter Species" associated with Citrus Huanglongbing. Plant Disease 91:51-58.



Tubajika, K.M., Janowiack, J.J, Mack, R., and Hoover, K. 2006. Efficacy of radio frequency treatment and its potential for control of sapstain and wood decay fungi on red oak, poplar, and southern yellow pine wood species. J. Wood Science: DOI 10.1007/s 10086-006-0844-x (in Press).

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CPHST Spotlight: Vicky McCollough

icky McCollough joined the CPHST Director's Office in August 2005 as the Office Automation Assistant/ Receptionist. Vicky was born in Indianapolis, Indiana and attended Indiana Business College where she earned her degree in Executive Secretarial Sciences.

After moving to Cary, NC in 1998, she started work as a temporary employee with the Wake County Department of Revenue in Raleigh. Shortly thereafter, she secured a job with the NC Department of Labor working with OSHA to compile statistical data from the OSHA Workplace Safety surveys and later was promoted to a Records Analyst.

In 2000, Vicky started her USDA career as a program clerk in Veterinary Services (VS). With VS, she helped launch the NC Scrapie Identification Program and the Voluntary Scrapie Certification Program for sheep and goats, issued licenses to garbage feeder facilities for the Swine Health Protection Program, and helped deploy USDA veterinarians and private sector volunteers to assist the British Department of Fisheries during the foot and mouth outbreak in the U.K.

Get to know the new CPHST team members!

In her free time, Vicky and her daughter, Autumn, enjoy pet-sitting and volunteering for Marley's Cat Tales, a local cat rescue agency. Marley's Cat Tales volunteers found homes for more

than 20 cats last month.





CPHST Spotlight: Hazel Goodwin

azel joined the CPHST in June 2005 as a Lab Support Assistant for NPGBL in Beltsville, MD. Hazel joined APHIS in March 2005 in the first Operation Jumpstart II class. During OJ II, she worked within Animal Care, with the Photographer in LPA and the **Emergency Management and Homeland** Security units in Riverdale, MD.

Hazel received her degree in Business from Eastern Illinois University in 1968. She lived and worked in Illinois, Missouri, Maryland, New Jersey and throughout the Northeast U.S. She worked in private industry for 37 years

as a computer programmer, programming/operating system trainer, project manager, staff manager, soft skills trainer and sales manager, strategic consultant, sales representative, and product marketing manager. Hazel worked for McDonnell Douglas Automation Company, XEROX, PEPCO, Northeast Utilities, DEC(HP), Chubb Computer Services and Successories, among other employers. She was awarded many top performance, top sales and customer service awards during her career.

Hazel's interests are writing poetry and

scenic photography from which she creates photographic gift items. Hazel has poems published on tape and in poetry anthologies that include Best

Poems of the 90's. Hazel was listed in Who's Who In The East and in Who's Who In Finance & Industry.





CPHST Spotlight: Renee DeVries

enee DeVries grew up in West Michigan and attended Calvin College where she graduated with a B.Sc. in Biology. She moved to E. Lansing where she worked at Michigan State University as a Research Assistant on Fusarium oxysporum f. sp. asparagi, F. moniliforme, and asparagus virus I and II. At MSU Renee earned a second B.Sc. in Horticulture and a M.Sc. degree in Plant Pathology (bacterial canker of tomato). She moved to the East Coast in 2000 and accepted a job at Longwood Gardens, Inc. (PA) where she set up a diagnostic laboratory and tested ornamentals for tomato spotted wilt and potyviruses. She joined

USDA-ARS in 1993 and spent the next six years conducting the quarantine testing of imported potato and sweet potato germplasm. In 1999 she joined the NPGBL in Beltsville, MD as a Plant Pathologist and conducted the ELISA portion of the federal confirmation testing for plum pox virus. The next several years at NPGBL were busy due to Ralstonia solanacearum r3b2, potato mop top virus and Phytophthora ramorum. Renee moved into a Quality Manager-Plant Pathologist position at NPGBL in 2004. She is responsible for reviewing all confirmation test results and writing the NPGBL result reports for PPQ and the Regions. She is active

in the CPHST provisional approval/lab accreditation program and the NPDN (quality assurance, training, and scenario exercises). She supports the NPGBL's Select Agent registration and the BSL3 facility. Renee is responsible for implementing CPHST QMS at the

NPGBL, which will be the first CPHST lab to seek ISO/IEC 17025 (2005) accreditation.



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